



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2019-0017; Product Identifier 2018-NM-112-AD; Amendment 39-19662; AD 2019-12-07]

RIN 2120-AA64

Airworthiness Directives; Airbus SAS Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2007-11-11 and AD 2017-01-11, which applied to all Airbus SAS Model A318 and Model A319 series airplanes; Model A320-211, -212, -214, -231, -232, and -233 airplanes; and Model A321 series airplanes. AD 2007-11-11 required an inspection to determine the serial number of both main landing gear (MLG) sliding tubes, repetitive inspections for cracking of the affected MLG sliding tubes and corrective actions if necessary, and eventual replacement of both MLG shock absorbers. AD 2017-01-11 required identification of the part number and serial number of the MLG sliding tubes; inspection of affected chromium plates and sliding tube axles for damage; and replacement of the sliding tube if necessary. This AD retains certain requirements of AD 2007-11-11 and AD 2017-01-11. This AD also requires repetitive inspections of affected MLG sliding tubes for cracking, replacement of

cracked MLG sliding tubes, and eventual replacement of each affected MLG sliding tube. This AD was prompted by cracks found in the MLG sliding tubes due to certain manufacturing defects that might not be identified using the current on-wing scheduled inspections. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain other publication listed in this AD as of February 22, 2017 (82 FR 5362, January 18, 2017).

The Director of the Federal Register approved the incorporation by reference of a certain other publication listed in this AD as of June 29, 2007 (72 FR 29241, May 25, 2007).

ADDRESSES: For Airbus service information identified in this final rule, contact Airbus SAS, Airworthiness Office – EIAS, Rond-Point Emile Dewoitine No: 2, 31700 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com; Internet <http://www.airbus.com>.

For Safran and Messier-Dowty service information identified in this final rule, contact Safran Landing Systems, One Carbon Way, Walton, KY 41094; telephone (859)

525-8583; fax (859) 485-8827; Internet <https://www.safran-landing-systems.com>.

You may view this referenced service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0017.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0017; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Sanjay Ralhan, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3223.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2007-11-11, Amendment 39-15068 (72 FR 29241, May 25, 2007) (“AD 2007-11-11”), and AD 2017-01-11, Amendment 39-18778 (82 FR 5362,

January 18, 2017) (“AD 2017-01-11”). AD 2007-11-11 applied to all Airbus SAS Model A318 and Model A319 series airplanes; Model A320-211, -212, -214, -231, -232, and -233 airplanes; and Model A321 series airplanes. AD 2017-01-11 applied to all Airbus SAS Model A318 and Model A319 series airplanes; Model A320-211, -212, -214, -231, -232, and -233 airplanes; and Model A321 series airplanes.

The NPRM published in the Federal Register on February 25, 2019 (84 FR 5960). The NPRM was prompted by a determination that cracks were found in the MLG sliding tubes due to certain manufacturing defects that might not be identified using the current on-wing scheduled inspections. The NPRM proposed to retain certain requirements of AD 2007-11-11 and AD 2017-01-11. The NPRM also proposed to require repetitive inspections of affected MLG sliding tubes for cracking, replacement of cracked MLG sliding tubes, and eventual replacement of each affected MLG sliding tube. The FAA is issuing this AD to address cracking in an MLG sliding tube, which could lead to failure of an MLG sliding tube resulting in MLG collapse, damage to the airplane, and injury to passengers.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2018-0135, dated June 26, 2018 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all Airbus SAS Model A318 and A319 series airplanes; Model A320-211, -212, -214, -216, -231, -232, and -233 airplanes; and Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes. The MCAI states:

Cracks were reported on [main landing gear] MLG sliding tubes and the investigations determined metallic inclusion during production and abnormal grinding operation during overhaul as cause of these cracks. Prompted by these reports, respectively, [Direction Generale de l'Aviation Civile] DGAC France issued [French] AD F-2005-115 (EASA approval 2005-6032) [which corresponds to FAA AD 2007-11-11] and EASA issued AD 2014-0058 [which corresponds to FAA AD 2017-01-11], both requiring inspections and replacement of certain MLG sliding tubes.

More recently, during overhaul, cracks were found in the lower slave link bracket lug holes on two MLG sliding tubes. Subsequent investigations determined that these cracks may have developed due to burrs, which could have been present since manufacture. Based on the fact that the sliding tube is certified as a safe life part, this is considered to be a non-compliance with the requirements of [Joint Aviation Requirements] JAR 25.571(c). Cracks in the affected sliding tubes may not be found during the existing on-wing scheduled inspections.

This condition, if not detected and corrected, could lead to sliding tube failure, possibly resulting in MLG collapse, damage to the aeroplane and injury to occupants.

Prompted by these findings, Safran Landing Systems, the MLG manufacturer (formerly Messier-Dowty, Messier-Bugatti-Dowty, and hereafter referred to as "Safran" in this AD), introduced additional quality steps to eliminate burrs in the manufacturing process. To address this potential unsafe condition on delivered MLG sliding tubes, Airbus issued SB [service bulletin] A320-32-1441, providing instructions for on-wing repetitive inspections, and Safran issued SB 200-32-321 and SB 201-32-68, as applicable to MLG configuration, providing instructions for inspection in shop.

For the reason described above, this [EASA] AD partially retains the requirements of DGAC France AD F-2005-115 (EASA approval 2005-6032) and EASA AD 2014-0058, which are superseded, requires repetitive inspections of the affected MLG sliding tubes [for cracking] and, depending on findings, accomplishment of applicable corrective

action(s) [replacement of a cracked MLG sliding tube with a serviceable MLG sliding tube]. This [EASA] AD also defines criteria for installation on an aeroplane of an affected MLG sliding tube.

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0017.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA's response to each comment.

Support for the NPRM

Air Line Pilots Association, International (ALPA) supported the intent of the NPRM.

Request to Remove Functional Testing from “Required for Compliance (RC)” Requirements

Delta Air Lines (DAL) requested that the functional testing requirement be removed from the required for compliance “RC” procedures identified in the Accomplishment Instructions of Airbus Service Bulletin A320-32-1441, Revision 01, dated December 14, 2017. The commenter explained that paragraph 3.D. of the Accomplishment Instructions of Airbus Service Bulletin A320-32-1441, Revision 01, dated December 14, 2017, describes post-modification testing, which results in functional testing of the brake and wheel installation functionality. The commenter noted that these tests do not require any special equipment for testing or require the operation of

equipment. The commenter stated that it would prefer to use the airplane maintenance manual (AMM) procedures instead of a functional test.

The FAA disagrees with the commenter's request. Functional testing is required by EASA, the state of design authority for the Model A318 and Model A319 series airplanes; Model A320-211, -212, -214, -231, -232, and -233 airplanes; and Model A321 series airplanes; to restore the airplane to its type design requirements. In addition, the functional test procedure described in the above mentioned Airbus service information refers to the procedures in AMM task 32-41-11-400-006, "Installation of the MLG Wheels," to perform the functional test, which is what the commenter requested. The functional test is required for compliance to ensure that risk has been mitigated and the airplane can be returned to service per the type design requirements. The FAA has not changed this AD in regard to this issue.

Request for Clarification of Definition

DAL observed that paragraph (n)(1) of the proposed AD defined affected MLG shock absorbers as those having a part number and serial number identified in Messier-Dowty Service Bulletin 200-32-286, Revision 3, dated October 3, 2008, for Model A318, A319, and A320 series airplanes; and Messier-Dowty Service Bulletin 201-32-43, Revision 3, dated October 3, 2008, for Model A321 series airplanes. DAL noted that, upon review of this service information, it determined that there are no specific part number and serial number combinations for the MLG shock absorbers listed, and that the service information identified serial numbers for only the MLG sliding tubes.

From these statements, the FAA infers that DAL was requesting clarification of the definition of an affected MLG shock absorber. The FAA agrees to clarify this definition. An affected MLG shock absorber assembly contains an affected MLG sliding tube subassembly. The intent of paragraph (n) of this AD is to assist operators in identification of the discrepant MLG sliding tube part numbers. Furthermore, this definition matches what was provided in the corresponding MCAI AD issued by EASA. The FAA has not revised this AD in regard to this issue.

Request for Clarification of Parts Installation Prohibition

DAL requested that paragraph (r)(1) of the proposed AD be revised to state that, as of the effective date of the AD, no person may install an affected MLG sliding tube on any airplane. The commenter noted that paragraph (r)(1) of the proposed AD stated that, as of the effective date of this AD, no person may install on any airplane an affected MLG shock absorber. The commenter stated that its request is supported by the fact that the proposed AD only described inspections and actions based on the MLG sliding tubes, not the remainder of the MLG shock absorber. The commenter further explained that it is feasible that non-sliding tube components of the MLG shock absorber assemblies may be perfectly fit for operation beyond the AD replacement times. The commenter observed that this change would allow operators to use any existing stock of MLG shock absorber related components (other than the affected MLG sliding tubes). The commenter stated that its position is further supported by the statements in the “Proposed Requirements of this NPRM” paragraph, because no mention of an MLG shock absorber replacement is discussed. The commenter also explained that it would be difficult to comply with the

proposed requirement specified in paragraph (r)(1) of the proposed AD, since paragraph (n)(2) of the proposed AD does not list specific MLG shock absorber part number and serial number combinations.

The FAA agrees with the intent of the commenter's request. The affected MLG shock absorber assembly contains an MLG sliding tube subassembly. The intent of paragraph (r)(1) of this AD is to prohibit the installation of an MLG shock absorber assembly containing a discrepant MLG sliding tube subassembly part number. The FAA has revised paragraph (r)(1) of this AD to prohibit, as of the effective date of this AD, the installation of an MLG shock absorber assembly containing a discrepant MLG sliding tube part number.

Request to Allow the Use of Future Revisions of Service Information

DAL requested that the proposed AD be revised to allow the use of future revisions of the service information. The commenter noted that the EASA AD allows the use of future revisions of service information.

The FAA disagrees with the commenter's request. The FAA may not refer to any document that does not yet exist. In general terms, the FAA is required by Office of the Federal Register (OFR) regulations for approval of materials incorporated by reference, as specified in 1 CFR 51.1(f), to either publish the service document contents as part of the actual AD language; or submit the service document to the OFR for approval as referenced material, in which case the FAA may only refer to such material in the text of an AD. The AD may refer to the service document only if the OFR approved it for incorporation by reference. See 1 CFR part 51. To allow operators to use later revisions

of the referenced document (issued after publication of the AD), either the FAA must revise the AD to reference specific later revisions, or operators must request approval to use later revisions as an alternative method of compliance with this AD under the provisions of paragraph (w)(1) of this AD. The FAA has not revised this AD regarding this issue.

Conclusion

The FAA reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule with the changes described previously and minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

The FAA also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

Related Service Information under 1 CFR part 51

Airbus has issued the following service information.

- Service Bulletin A320-32-1441, Revision 01, dated December 14, 2017. This service information describes procedures for inspections of the MLG sliding tubes for cracking and corrective actions (which includes replacing the MLG sliding tubes).

- Service Bulletin A320-32A1273, Revision 02, dated May 26, 2005. This service information specifies the serial numbers of the MLG sliding tubes that must be replaced.

Safran Landing Systems has issued the following service information. These documents are distinct since they apply to different airplane models.

- Safran Service Bulletin 200-32-321, Revision 2, dated October 3, 2017; and Service Bulletin 201-32-68, Revision 2, dated October 3, 2017. These documents specify the part numbers and serial numbers of the affected MLG sliding tubes.

- Messier-Dowty Service Bulletin 200-32-286, Revision 3, dated October 3, 2008; and Service Bulletin 201 32-43, Revision 3, dated October 3, 2008. These documents specify the part numbers and serial numbers of the affected MLG shock absorbers.

This AD also requires Airbus Service Bulletin A320-32-1416, including Appendix 01, dated March 10, 2014, which the Director of the Federal Register approved for incorporation by reference as of February 22, 2017 (82 FR 5362, January 18, 2017).

This AD also requires Airbus Service Bulletin A320-32A1273, Revision 02, including Appendix 01, dated May 26, 2005, which the Director of the Federal Register approved for incorporation by reference as of June 29, 2007 (72 FR 29241, May 25, 2007).

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 1,186 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Retained actions from AD 2007-11-11 (297 airplanes) *	8 work-hours X \$85 per hour = \$680	Up to \$45,310	Up to \$46,670	Up to \$13,659,030*
Retained actions from AD 2017-01-11	18 work-hours X \$85 per hour = \$1,530	\$0	\$1,530	\$1,814,580
New actions	13 work-hours X \$85 per hour = \$1,105	**	\$1,105**	\$1,310,530**

* Operators should note that, although all U.S.-registered airplanes are subject to the requirements of AD 2007-11-11, there are only 297 possible affected MLG sliding tubes in the worldwide fleet. The FAA has no way of knowing how many affected MLG sliding tubes, if any, are installed in U.S.-registered airplanes.

** The FAA has received no definitive data for the parts costs for the replacements.

The FAA estimates the following costs to do any necessary on-condition action that would be required based on the results of any required actions. The FAA has no way of determining the number of aircraft that might need this on-condition action:

Estimated costs of on-condition action

Labor cost	Parts cost	Cost per product
6 work-hours X \$85 per hour = \$510	*	\$510*

* The FAA has received no definitive data for the parts costs for the on-condition actions.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

Regulatory Findings

The FAA determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on

the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Will not affect intrastate aviation in Alaska; and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by:

- a. Removing Airworthiness Directive (AD) 2007-11-11, Amendment 39-15068 (72 FR 29241, May 25, 2007); and AD 2017-01-11, Amendment 39-18778 (82 FR 5362, January 18, 2017);

- b. Adding the following new AD:

2019-12-07 Airbus SAS: Amendment 39-19662; Docket No. FAA-2019-0017; Product

Identifier 2018-NM-112-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces the following ADs.

- (1) AD 2007-11-11, Amendment 39-15068 (72 FR 29241, May 25, 2007) (“AD 2007-11-11”).
- (2) AD 2017-01-11, Amendment 39-18778 (82 FR 5362, January 18, 2017) (“AD 2017-01-11”).

(c) Applicability

This AD applies to the Airbus SAS airplanes identified in paragraphs (c)(1) through (c)(4) of this AD, certificated in any category, all manufacturer serial numbers (MSNs).

- (1) Model A318-111, -112, -121, and -122 airplanes.
- (2) Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes.
- (3) Model A320-211, -212, -214, -216, -231, -232, and -233 airplanes.
- (4) Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 32, Landing gear.

(e) Reason

This AD was prompted by a determination that cracks were found in the main landing gear (MLG) sliding tubes due to certain manufacturing defects that might not be identified using the current on-wing scheduled inspections. The FAA is issuing this AD to address cracking in an MLG sliding tube, which could lead to failure of an MLG sliding tube resulting in MLG collapse, damage to the airplane, and injury to passengers.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Retained Replacement of AD 2007-11-11, with Updated References to Service Information and Specific Delegation Approval Language

This paragraph restates the requirements of paragraph (i) of AD 2007-11-11, with updated references to service information and specific delegation approval language.

Within 41 months after June 29, 2007 (the effective date of AD 2007-11-11), replace all MLG shock absorbers equipped with MLG sliding tubes having serial numbers listed in Airbus All Operators Telex (AOT) A320-32A1273, Revision 01, dated May 6, 2004; or the Accomplishment Instructions of Airbus Service Bulletin A320-32A1273, Revision 02, including Appendix 01, dated May 26, 2005; with new or serviceable MLG shock absorbers equipped with MLG sliding tubes having serial numbers not listed in Airbus AOT A320-32A1273, Revision 01, dated May 6, 2004; or the Accomplishment Instructions of Airbus Service Bulletin A320-32A1273, Revision 02, including Appendix 01, dated May 26, 2005; using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus SAS's EASA Design Organization Approval (DOA).

If approved by the DOA, the approval must include the DOA-authorized signature. As of June 29, 2007, only Airbus Service Bulletin A320-32A1273, Revision 02, including Appendix 01, dated May 26, 2005, may be used to determine the affected MLG sliding tubes.

Note 1 to paragraph (g): Guidance on the replacement specified in paragraph (g) of this AD can be found in Airbus A318/A319/A320/A321 Aircraft Maintenance Manual Chapter 32-11-13, page block 401.

(h) Retained MLG Sliding Tube Part Number and Serial Number Identification of AD 2017-01-11, with No Changes

This paragraph restates the requirements of paragraph (g) of AD 2017-01-11, with no changes. Within three months after February 22, 2017 (the effective date of AD 2017-01-11): Do an inspection to identify the part number and serial number of the MLG sliding tubes installed on the airplane. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number and serial number of the MLG sliding tubes can be conclusively determined from that review.

(i) Retained Identification of Airplanes of AD 2017-01-11, with No Changes

This paragraph restates the identification specified in paragraph (h) of AD 2017-01-11, with no changes. An airplane with a MSN not listed in figure 1 to paragraph (i) of this AD is not affected by the requirements of paragraph (j) of this AD, provided it can be determined that no MLG sliding tube having a part number and serial number listed in table 1 to paragraphs (i), (j), (l)(1), (l)(2), (m)(1), and (m)(2) of this AD has been installed on that airplane since first flight of the airplane.

Figure 1 to Paragraph (i) – Affected Airplanes Listed by MSN

Affected Airplanes Listed by MSN					
0179	0214	0296	0412	0558	0604
0607	0668	0704	0720	0726	0731
0754	0771	0799	0828	0841	0855
0909	0914	0925	0939	0986	1028
1030	1041	1070	1083	1093	1098
1108	1148	1294	1356	2713	2831

Table 1 to Paragraphs (i), (j), (l)(1), (l)(2), (m)(1), and (m)(2) – Affected MLG Sliding Tubes

Part Number	Serial Number
201160302	78B
201160302	1016B11
201160302	1144B
201371302	B4493
201371302	B4513
201371302	SS4359
201371302	B4530
201371302	B4517
201371302	B4568
201371302	B4498
201371302	4490B
201371302	B202-4598
201371302	B165-4623
201371302	B244-4766
201371302	B267-4794
201371302	B272-4813
201160302	1108B

Part Number	Serial Number
201371304	B041-4871
201371304	B045-4869
201371304	B001-4781
201371304	B051-4892
201371304	B110-1952
201371304	B054-4891
201371304	B063-4921
201371304	B071-4911
201371304	B071-4917
201371304	B080-1933
201371304	B117-5010
201371304	B120-4989
201371304	B132-2023
201371304	B114-1956
201371304	B208-2009
201371304	B133-1947
201371304	B154-5037
201371304	B89 4952
201371304	B129-1964
201371304	B227-2010
201371304	B170-5031
201371304	B182-5047
201371304	B239-2053
201371304	B1401-2856
201371304	B1813-3142
201371304	B116-5004
201522353	B011-149
201522350	B014-25
201522350	B019-56

Part Number	Serial Number
201522350	B019-57
201522350	B021-69
201522350	B022-60
201522353	B03-111
201522353	B03-110
201522353	B112-317
201522353	B174-351
201522353	B179-392
201383350	4377B
201383350	4393B
201383350	B1831
201383350	B1832
201383350	SS4355B
201383350	SS4400B

(j) Retained Inspections of AD 2017-01-11, with No Changes

This paragraph restates the requirements of paragraph (i) of AD 2017-01-11, with no changes. For each MLG sliding tube identified as required by paragraph (h) of this AD, having a part number and serial number listed in table 1 to paragraphs (i), (j), (l)(1), (l)(2), (m)(1), and (m)(2) of this AD: Within 3 months after February 22, 2017 (the effective date of AD 2017-01-11) inspect affected MLG axles and brake flanges by doing a detailed visual inspection of the chromium plates for damage, and a Barkhausen noise inspection of the MLG sliding tube axles for damage, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-32-1416, including Appendix 01, dated March 10, 2014. For Model A318 series airplanes, use the

procedures specified for Model A319 series airplanes in Airbus Service Bulletin A320-32-1416, including Appendix 01, dated March 10, 2014.

(k) Retained Corrective Action of AD 2017-01-11, with No Changes

This paragraph restates the requirements of paragraph (j) of AD 2017-01-11, with no changes. If, during any inspection required by paragraph (j) of this AD, any damage is detected: Before further flight, replace the MLG sliding tube with a serviceable MLG sliding tube, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-32-1416, including Appendix 01, dated March 10, 2014. For Model A318 series airplanes, use the procedures specified for Model A319 series airplanes in Airbus Service Bulletin A320-32-1416, including Appendix 01, dated March 10, 2014.

(l) Retained Definition of Serviceable MLG Sliding Tube of AD 2017-01-11, with No Changes

This paragraph restates the definition specified in paragraph (k) of AD 2017-01-11, with no changes. For the purpose of paragraph (k) of this AD, a serviceable MLG sliding tube is defined as an MLG sliding tube that meets the criterion in either paragraph (l)(1) or (l)(2) of this AD.

(1) An MLG sliding tube having a part number and serial number not listed in table 1 to paragraphs (i), (j), (l)(1), (l)(2), (m)(1), and (m)(2) of this AD.

(2) An MLG sliding tube having a part number and serial number listed in table 1 to paragraphs (i), (j), (l)(1), (l)(2), (m)(1), and (m)(2) of this AD that has passed the inspections required by paragraph (j) of this AD.

(m) Retained Parts Installation Prohibition of AD 2017-01-11, with No Changes

This paragraph restates the requirements of paragraph (l) of AD 2017-01-11, with no changes.

(1) For airplanes that have an MLG sliding tube installed that has a part number and serial number listed in table 1 to paragraphs (i), (j), (l)(1), (l)(2), (m)(1), and (m)(2) of this AD: After an airplane is returned to service following accomplishment of the actions required by paragraphs (h), (i), and (j) of this AD, no person may install on any airplane an MLG sliding tube having a part number and serial number listed in table 1 to paragraphs (i), (j), (l)(1), (l)(2), (m)(1), and (m)(2) of this AD, unless that MLG sliding tube has passed the inspection required by paragraph (j) of this AD.

(2) For airplanes that, as of February 22, 2017 (the effective date of AD 2017-01-11), do not have an MLG sliding tube installed that has a part number and serial number listed in table 1 to paragraphs (i), (j), (l)(1), (l)(2), (m)(1), and (m)(2) of this AD: No person may install, on any airplane, an MLG sliding tube having a part number and serial number listed in table 1 to paragraphs (i), (j), (l)(1), (l)(2), (m)(1), and (m)(2) of this AD unless that MLG sliding tube has passed the inspection required by paragraph (j) of this AD.

(n) New Definitions

For the purpose of paragraphs (o), (p), (q), (r), and (s) of this AD the following definitions apply.

(1) Affected MLG shock absorber: An MLG shock absorber having a part number and serial number as identified in Messier-Dowty Service Bulletin 200-32-286,

Revision 3, dated October 3, 2008, for Model A318, A319, and A320 series airplanes; and Messier-Dowty Service Bulletin 201-32-43, Revision 3, dated October 3, 2008, for Model A321 series airplanes.

(2) Affected MLG sliding tube: An MLG sliding tube having a part number and serial number as identified in Appendix B of Safran Service Bulletin 200-32-321, Revision 2, dated October 3, 2017, for Model A318, A319, and A320 series airplanes; or Safran Service Bulletin 201-32-68, Revision 2, dated October 3, 2017, for Model A321 series airplanes, except those parts that passed an inspection as specified in Safran Service Bulletin 200-32-321; or Safran Service Bulletin 201-32-68; as applicable; and those parts that, after that inspection, have been repaired, using instructions approved by the Manager, International Section, Transport Standards Branch, FAA; or EASA; or Airbus SAS's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

(3) Serviceable MLG sliding tube: An MLG sliding tube that is not affected, or an affected MLG sliding tube, that has not exceeded 10,000 flight cycle since first installation on an airplane, or an affected MLG sliding tube that, within the last 5,000 flight cycles before installation on an airplane, passed an inspection specified in Airbus Service Bulletin A320-32-1441.

(o) New Requirement of this AD: Repetitive Inspections

At the compliance time specified in figure 2 to paragraph (o) of this AD, and thereafter at intervals not to exceed 5,000 flight cycles: Do a detailed inspection of each

affected MLG sliding tube, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-32-1441, Revision 01, dated December 14, 2017.

Figure 2 to Paragraph (o) – Initial Compliance Time for MLG Sliding Tube Inspection

Initial Compliance Time for MLG Sliding Tube Inspection (whichever occurs later, A or B)	
A	Prior to exceeding 10,000 flight cycles since first installation of an affected MLG sliding tube on an airplane.
B	Within 5,000 flight cycles or 25 months, whichever occurs first after the effective date of this AD.

Note 2 to paragraph (o): If no reliable data regarding the number of flight cycles accumulated by the MLG sliding tube are available, operators may refer to the guidance specified in Chapter 5.2, “Traceability”, of Section 1, of Part 1 of the Airbus A318/A319/A320/A321 Airworthiness Limitations Section.

(p) New Requirement of this AD: Corrective Actions

(1) If, during any inspection required by paragraph (o) of this AD, any crack is detected on an MLG sliding tube: Before further flight, replace that MLG sliding tube with a serviceable MLG sliding tube, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-32-1441, Revision 01, dated December 14, 2017.

(2) Replacement of an MLG on an airplane with an MLG having a serviceable MLG sliding tube installed is an acceptable method to comply with the requirements of paragraph (p)(1) of this AD for that airplane.

(q) New Requirement of this AD: Part Replacement

(1) Within 10 years after the effective date of this AD: Replace each affected MLG sliding tube with an MLG sliding tube that is not affected. Installation of an MLG sliding tube that is not affected on an airplane constitutes terminating action for the repetitive inspections required by paragraph (o) of this AD for that airplane.

(2) Replacement of an MLG on an airplane with an MLG that does not have an affected MLG sliding tube installed is an acceptable method to comply with the requirement of paragraph (q)(1) of this AD for that airplane.

(r) New Requirement of this AD: Parts Installation Limitation

(1) As of the effective date of this AD no person may install on any airplane an affected MLG shock absorber assembly containing a discrepant MLG sliding tube part number.

(2) Do not install an affected MLG sliding tube on any airplane as specified in paragraph (r)(2)(i) or (r)(2)(ii) of this AD, as applicable.

(i) For an airplane with an affected MLG sliding tube installed as of the effective date of this AD: After replacement of each affected MLG sliding tube as required by paragraph (q) of this AD.

(ii) For an airplane that does not have an affected MLG sliding tube installed as of the effective date of this AD: As of the effective date of this AD.

(s) Identification of Airplanes Not Affected by Certain Requirements of this AD

An airplane on which Airbus Modification 161202 or Modification 161346 has been installed in production is not affected by the requirements of paragraphs (g), (h), (j),

(o), and (q), of this AD, provided it has been verified that no affected MLG sliding tube is installed on that airplane.

(t) Credit for Previous Actions

(1) This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before June 29, 2007, using Airbus AOT A320-32A1273, Revision 01, dated May 6, 2004. This document was incorporated by reference in AD 2004-11-13, Amendment 39-13659 (69 FR 31867, June 8, 2004).

(2) This paragraph provides credit for the initial inspection and applicable corrective actions required by paragraphs (o) and (p) of this AD if those actions were performed before the effective date of this AD, using the Accomplishment Instructions in Airbus Service Bulletin A320-32-1441, dated December 28, 2016.

(u) Service Information Exceptions

The service information specified in paragraph (g) of this AD has instructions to send any cracked part to Messier-Dowty. This AD does not include such a requirement, in accordance with the procedures specified in paragraph (w)(2) of this AD.

(v) No Reporting Requirement

Although Airbus Service Bulletin A320-32-1441, Revision 01, dated December 14, 2017, specifies to submit certain information to the manufacturer, and specifies that action as “RC,” (required for compliance) this AD does not include that requirement.

(w) Other FAA AD Provisions

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, International

Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Section, send it to the attention of the person identified in paragraph (x)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov.

(i) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(ii) AMOCs approved previously for AD 2007-11-11 are approved as AMOCs for the corresponding provisions of paragraph (g) of this AD.

(iii) AMOCs approved previously for AD 2017-01-11 are approved as AMOCs for the corresponding provisions of paragraphs (h), (i), (j), (k), (l), and (m) of this AD.

(2) *Contacting the Manufacturer:* As of the effective date of this AD, for any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or EASA; or Airbus SAS's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

(3) *Required for Compliance (RC):* Except as required by paragraphs (u) and (v) of this AD: If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are

not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(x) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0135, dated June 26, 2018, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0017.

(2) For more information about this AD, contact Sanjay Ralhan, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3223.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (y)(6), (y)(7), and (y)(8) of this AD.

(y) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(3) The following service information was approved for IBR on [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(i) Airbus Service Bulletin A320-32-1441, Revision 01, dated December 14, 2017.

(ii) Messier-Dowty Service Bulletin 200-32-286, Revision 3, dated October 3, 2008.

(iii) Messier-Dowty Service Bulletin 201-32-43, Revision 3, dated October 3, 2008.

(iv) Safran Service Bulletin 200-32-321, Revision 2, dated October 3, 2017.

(v) Safran Service Bulletin 201-32-68, Revision 2, dated October 3, 2017.

(4) The following service information was approved for IBR on February 22, 2017 (82 FR 5362, January 18, 2017).

(i) Airbus Service Bulletin A320-32-1416, including Appendix 01, dated March 10, 2014.

(ii) [Reserved]

(5) The following service information was approved for IBR on June 29, 2007 (72 FR 29241, May 25, 2007).

(i) Airbus Service Bulletin A320-32A1273, Revision 02, including Appendix 01, dated May 26, 2005.

(ii) [Reserved]

(6) For Airbus service information identified in this AD, contact Airbus SAS, Airworthiness Office – ELIAS, Rond-Point Emile Dewoitine No: 2, 31700 Blagnac Cedex,

France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com; Internet <http://www.airbus.com>.

(7) For Safran and Messier-Dowty service information identified in this AD, contact Safran Landing Systems, One Carbon Way, Walton, KY 41094; telephone (859) 525-8583; fax (859) 485-8827; Internet <https://www.safran-landing-systems.com>.

(8) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(9) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on June 19, 2019.

Michael Kaszycki,
Acting Director,
System Oversight Division,
Aircraft Certification Service.

[FR Doc. 2019-13545 Filed: 6/26/2019 8:45 am; Publication Date: 6/27/2019]